UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/938,403	08/24/2001	Frank Leymann	DE920000063US1	9926

7590 04/02/2004	EXAMINER
William Kinnaman, Jr.	LE, DEBBIE M

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ART UNIT	PAPER NUMBER
2177	

DATE MAILED: 04/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _24 August 2001_.

2a)☐ This action is **FINAL**.　　2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-25_ is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-25_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _24 August 2001_ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a)☒ All　b)☐ Some *　c)☐ None of:

　　　1.☒ Certified copies of the priority documents have been received.

　　　2.☐ Certified copies of the priority documents have been received in Application No. _____.

　　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
　　Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
　　Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which

papers have been placed of record in the file.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly
claiming the subject matter which the applicant regards as his invention.

Claims 13-15, 23-25 are rejected under 35 U.S.C. 112, second paragraph, as

being indefinite for failing to particularly point out and distinctly claim the subject matter

which applicant regards as the invention.

Claims 13-15 and 23-25 are objected because a single claim which claims both

an apparatus and method steps of using the apparatus is indefinite under 35 U.S.C 112,

second paragraph. This type of claim is indefinite because it fails to positively recite the

boundaries sought for protection. The metes and bounds of the claim cannot be

determined because it is unclear as to which category of subject matter sought or

protection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of

the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g)

prior art under 35 U.S.C. 103(a).

Claims 1-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Davis et al. (USP 5,937,399) in view of Paskowitz (USP 6,377,937 B1).

As to claims 1 and 16, Davis discloses a system for distributing of process flow

activities in a workflow management system (WFMS). The disclosed system uses

workflow process or process model to support business organizations activities in real

life. First, Davis's system comprises a workflow process or process model (col. 6, lines

7-11), which is equivalent the claimed *a first step of analyzing a process model.*

Davis teaches execution flow of process activities (col. 6, line 22-23), which is

equivalent to *defining an execution path through said process model as an application service* (business model; telecommunication services at col. 5, line 5, Fig. 2, legacy applications) and generate a case packet for each process instance to facilitate data passing between activities (col. 7, lines 20-21, col. 5, lines 6-12), which is equivalent to the claimed *creating an application service description document for said execution path*. Davis further teaches the resource manager 28a responds by returning an address list... to be used to effect the work (col. 12, lines 39-47), which is equivalent to the claimed *by retrieving and aggregating elements of said execution path associated element specifications from said process model*. Additionally, Davis's system disclosed a direct graph and rule (col. 11, lines 51-56), which is equivalent to the claimed *taxonomy scheme*. Davis teaches each rule node is used to specify process flows that are more complex than a simple sequence (the normal execution flow of process activities, col. 11, lines 43-61), which is equivalent to the claimed *a second step of calculating for said application service description document*. Davis teaches the OpenPM engine 20 creates a message containing the PRData for setting the following: (1) destination address, (2) a source address list, (3) and message dispatched (col. 12, lines 49-53), which is equivalent to a third step of assigning an access reference to said application service for enabling a user to navigate within said taxonomy scheme and to provide access to said application service by selecting said application services access reference.

Davis does not explicitly teach a highest matching degree with a category in a taxonomy scheme. However, Paskowitz teaches locates product/service information to

meet a buyer's needs (col. 2, line 67, col. 3, line which is equivalent to the claimed

language *application service description document*. Paskowitz teaches the buyer to

identify one or more characteristics of the product or service ... to allow a

characteristics-taxonomy-driven model to **automatically locates** information on

products/services and their sellers which **match** those characteristics (col. 3, lines 1-6),

which is equivalent to the claimed *a highest matching degree with a category in a*

taxonomy scheme. Further, Davis's system disclosed characteristics taxonomy is

structured into four domains of form (col. 3, line 15), which is equivalent to the claimed

category. Thus, it would have been obvious to one of ordinary skill in the art at the time

the invention was made to combine the teachings of the cited references to provide the

steps of highest matching with a category in a taxonomy scheme because it allows the

system to locate products/services for which a user is looking with more efficient.

As to claim 2, Paskowitz teaches wherein said second step comprises the steps

of: *extracting the features* (determine what words, col. 6, line 11) *of said application*

service description document and computing a feature vector (unit of measure for the

selected characteristics, col. 5, lines 4-5); *and comparing said feature vector to category*

vectors of categories in said taxonomy scheme and evaluating said category with said

highest matching degree (col. 3, lines 5-6, col. 5, lines 9-20).

As to claim 3, Davis teaches wherein said first step comprises the step of

retrieving and aggregating into said application service description document

specifications of a process activity that is part of said execution path (col. 12, lines

39-45).

As to claim 4, Davis teaches wherein said first step comprises the step of retrieving and aggregating into said application service description document specifications of a transition condition controlling transition from a first activity to a second activity that is part of said execution path (col. 12, lines 12-24, 30-35).

As to claim 5, Davis teaches wherein said first step comprises the step of retrieving and aggregating into said application service description document specifications of an input container or output container that is part of said execution path (col. 10, lines 12-16).

As to claim 6, Davis teaches wherein said first step comprises the step of retrieving and aggregating into said application service description document specifications of a process activity that is part of said execution path, said process activity being modeled as a subprocess model (col. 5, lines 56-67, col. 6, lines 1-5).

As per claim 7, Davis teaches wherein said method is executed for all execution paths within said process model and access is provided to each execution path as a corresponding application service within said taxonomy scheme (the normal execution flow of process activities, col. 11, lines 43-61).

As to claim 8, Paskowitz teaches wherein, if a certain one of said elements is a process activity which is modeled as a subprocess model, said method is also executed for said subprocess model and access is provided to a further execution path through said subprocess model as a further application service in said taxonomy scheme by a further access reference (col. 6, lines 43-58).

As to claims 9-10, the method of claim 8, Paskowitz teaches: a fourth step of tagging said further access reference with a cross-reference indication referring to said application service and a fourth step of tagging said access reference with a cross-reference indication referring to said further application service (col. 7, lines 53-63).

As to claim 11, Davis teaches wherein an audit trail comprising an execution protocol of said process model is analyzed for the execution frequency of said execution path and wherein said access reference is assigned to said taxonomy scheme only if said execution frequency is above a threshold value (col. 7, line 19, col. 9, lines 2-5, line 43-45).

As to claim 12, Davis teaches wherein said process model is executable by a workflow management system (abstract).

Claims 17-22 have similar limitations as to claims 3-8; therefore, they are rejected by the same subject matter.

Conclusion

If a reference indicated as being mailed on PTO-FORM 892 has not been enclosed in this action, please contact Lisa Craney whose phone number is (703) 305-9601 for faster service.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DEBBIE M LE whose telephone number is 703-308-6409. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, JOHN BREENE can be reached on 703-305-9790. The fax phone number

for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

DEBBIE M LE
Examiner
Art Unit 2177

Debbie Le

March 24, 2004.

GRETA ROBINSON
PRIMARY EXAMINER